

REGION OF OTTAWA-CARLETON  
RÉGION D'OTTAWA-CARLETON

REPORT  
RAPPORT

Our File/N/Réf.                   47-98-0036  
Your File/V/Réf.

DATE                               26 June 2000

TO/DEST.                         Co-ordinator Transportation Committee

FROM/EXP.                       Planning and Development Approvals Commissioner

SUBJECT/OBJET                 **ARTERIAL SIDEWALK IMPLEMENTATION PROGRAM**

---

### **DEPARTMENTAL RECOMMENDATIONS**

**That the Transportation Committee recommend Council:**

- 1. Approve the incremental construction of new sidewalks on what are now Regional Roads (New City Arterials) in accordance with Section 2.2 of the Transportation Master Plan on the following basis;**
  - a) At the time that the Region (New City) constructs, reconstructs, rehabilitates, widens, or otherwise significantly alters a Regional Road (New City Arterial) within the Urban or Greenbelt Areas of the Official Plan;**
  - b) That when widening, reconstructing or rehabilitating a Regional Road (New City Arterial) within a Village, consideration be given to providing additional sidewalks along with the replacement of any existing ones impacted by construction;**
- 2. Recommend to the Transition Board the establishment of an annual sidewalk deficiency and discontinuity retrofit priority program to be funded in the year 2001 Capital Budget and subsequent years.**

### **BACKGROUND**

On 30 May 1997, when considering the proposed Transportation Master Plan (TMP), Transportation Committee raised a number of issues pertaining to sidewalks. Specific concerns were raised about the lack of clarity of the respective responsibilities for the Region and area municipalities with regard to the

provision and maintenance of sidewalks on Regional roads. The Committee referred the following motion to staff for multi-departmental analysis:

*That Section 2.2.2 (of the TMP) be amended to include the following bullet: "Council shall assume responsibility for sidewalks along Regional Roads."*

Section 2.2.2 currently reads as follows:

*"Key operational initiatives for pedestrian facilities in this Master Plan are the provision of adequate crossing opportunities on Regional roads and at signalized intersections. The key maintenance initiative is the continued emphasis on co-operative planning for snow removal from sidewalks and bus stops between RMOC and other government agencies. The goal of cooperative planning will be to optimise co-ordination and service, and to minimise duplication of effort.*

*Council shall:*

- 1. Ensure the provision of sidewalks on both sides of all new and rebuilt roads serving transit routes and on both sides of Regional roads in the urban area, except those within or adjacent to the Greenbelt, where provision of a sidewalk or pathway on at least one side of those links abutting or connecting urban areas shall be ensured.*
- 2. Maintain the continuity of the pedestrian network by providing frequent crossing opportunities at Regional roads, and pedestrian connections to major activity centres.*
- 3. Review and modify, where necessary, pedestrian crossing times provided at signalised intersections to ensure adequate support of walking.*
- 4. Collaborate with other levels of government responsible for the development of standards and practices for winter maintenance of sidewalks and bus stops to promote walking and to optimise the coordination of activities and service."*

The Regional Official Plan includes policies which support the transportation philosophy enunciated in the TMP of firstly, minimising the need to travel, secondly, minimising distance travelled, and thirdly diverting as much travel as possible to the more environmentally friendly modes of walking, cycling, and public transit. Specific target shares of travel by the four major modes of travel (walking, cycling, public transit and automobile) are included in both Plans, with accompanying mode-specific policies for supportive measures, facility design and construction, and facility operations and maintenance.

## IMPLICATIONS OF MUNICIPAL RESTRUCTURING

The motion referred to staff raised the possibility of Council assuming the responsibility for sidewalks along Regional roads. Currently, under the Regional Municipalities Act, area municipalities are responsible for all sidewalks. Staff realized at an early date that changing the current responsibility would require changes to existing Provincial legislation which might have been difficult to achieve. As it was also anticipated that impending municipal restructuring would very likely take care of the situation, staff concluded that it would be prudent to postpone addressing the matter until governance in Ottawa-Carleton was decided. It is now obvious that this was the appropriate course of action as the proposal to establish the one tier City of Ottawa on 1 January 2001 will result in the Regional and municipal networks and all sidewalks being integrated under the responsibility of the new City.

This report is now written with future governance as a given, and the TMP, as amended, will reflect this reality.

Section 2.2.2 of the T.M.P. will be amended appropriately to reflect the decisions Regional Council makes concerning this report.

## DISCUSSION

### (i) Funding Responsibilities

Currently the Regional Municipalities Act allocates all funding responsibility for sidewalks on Regional roads to the area municipalities, including construction costs of new facilities, maintenance of existing facilities, and winter snow and ice control. The winter snow and ice control component represents the overwhelming portion of the maintenance costs associated with these facilities. The City of Ottawa for example incurs about \$3 Million annually for snow and ice control out of the total annual sidewalk maintenance budget of about \$3.4 Million for sidewalks. One third of this expenditure is on Regional roads.

As the achievement of targets for the pedestrian and transit shares of travel in the Transportation Master Plan are dependant upon the incremental expansion of the existing network of sidewalks on Regional roads to eventually develop a comprehensive network of sidewalks on both sides of roads within the Urban Areas and one side of roads linking these Areas across the Greenbelt the creation of the new one-tier City of Ottawa with its comprehensive responsibility for all roads and sidewalks will greatly facilitate achievement of the TMP targets. It is assumed that the majority of roads now classified as Regional Roads will remain classified as arterials in the future system.

Conclusion

*Given that a comprehensive pedestrian network of sidewalks along Regional roads (New City arterials) is required if the TMP targets for pedestrian and transit travel are to be realised, it would appear that the public's interest will be well served by the creation of the new City of Ottawa with one level of municipal responsibility for roads and sidewalks.*

(ii) Users of the Regional Transportation System

The safety and security of all users of the Regional transportation system is of paramount importance. While there is virtually no evidence in recent accident statistics that the absence of a sidewalk along a Regional Road was a contributory factor it is self-evident that pedestrian activity along busy arterial corridors, either by choice or by circumstances such as vehicle breakdown, does involve an extra degree of danger that should be addressed.

A specific example where the absence of a sidewalk of any kind is judged to be a serious safety deficiency is Eagleson/March Road in the vicinity of Beaverbrook.

Conclusion

*The provision of adequate sidewalk systems in Regional arterial corridors is fundamental to the safety and security of all pedestrians whether they are there by choice or as a result of circumstances such as vehicle breakdown.*

(iii) Villages

While the Transportation Master Plan does not include any specific policies with regard to the provision of sidewalks in Villages, it is recognised that they have pedestrian needs which are not much different in character than many urban locations, and that there should be a Council policy to reflect this. Given the variety of Village characteristics in terms of extent, type, age, mix, and density of urban developments and differing community facilities, it is questionable as to the value of directing efforts towards developing a general policy that could reasonably apply to all Villages. This, coupled with the very small proportion of the rural Regional road network to which this would apply, would suggest that any such efforts would be better directed at addressing the specific pedestrian needs of each Village.

Conclusion

*It is concluded that a general policy confirming that Council will consider pedestrian needs and the provision of sidewalks in Villages when undertaking substantial work on the roads therein, will provide the appropriate basis for addressing the specific pedestrian needs of each Village which are likely to be of a specific nature.*

(iv) Sidewalk Network Discontinuities and Deficiencies

Within the existing urban areas of the Region, sidewalks exist on both sides of most Regional roads. Of the remainder, a substantial proportion include a sidewalk on only one side, but can be considered as meeting the current policy in that:

- They are one-way ramps for which the presence of pedestrians between the ramp and the road which it is diverging from, or merging with, would present a safety hazard primarily for pedestrians. Examples include the Bronson Avenue southbound to Heron Road link, and the separate eastbound and westbound Carling Avenue roadways at the Kirkwood Avenue/Queensway interchange area.
- They are immediately adjacent to and parallel another street, as in the case of Richmond Road and Byron Avenue.
- They are immediately adjacent to large open space areas, such as the Experimental Farm, to which pedestrian access needs can be met by providing appropriately located Regional road crossing opportunities. This is consistent with the approved policy for the Greenbelt.

Apart from these anomalies, almost all of the remaining discontinuities in the network in the urban areas occur on ex-Provincial highways, where gravel or paved shoulders of a variety of widths are provided, and within, or adjacent to, major employment areas, where typically no sidewalks whatsoever are provided.

Where Regional roads are coincident with the boundary of the Greenbelt, a walkway or sidewalk on at least one side is present in more than half of the situations. All of these facilities have been introduced during the last few years in conjunction with the construction or widening of Hunt Club Road and Eagleson Road. In the case of roads crossing the Greenbelt, the network continuity is minimal, with Greenbank Road providing the only one complete link in the form of a National Capital Commission recreational path.

Table 1 summarises the current status of sidewalks for the portion of the Regional road network subject to the Transportation Master Plan policy concerning provision of sidewalks (2.2.2.1). As can be seen the Urban part of the Region has a 77% provision and compliance with current policy while for the Greenbelt and open space locations there is a 68% deficiency currently. For the Region as a whole the policy compliance currently sits at 69% with a deficiency level of 31% which translates into a need to provide approximately 215 Km of sidewalk throughout. It should also be noted that the City of Gloucester and the City of Nepean have 95% and 71%, respectively, deficiency levels in sidewalk provisions within the Greenbelt and open space area, which illustrates the considerable investments needed in order to meet the requirements through the Greenbelt.

The cost of providing the 215 Km of deficient missing sidewalks is estimated at approximately \$16 million. (2000\$)

Although the Transportation Master Plan recognises that the provision of a comprehensive and continuous network of sidewalks is essential if the high targets for walking and transit are to be realised, it is silent with regard to a specific implementation strategy or timetable.

From a minimum cost approach, sidewalks should be built when major road construction (reconstruction, rehabilitation, widening, intersection modifications, signal installations etc.) takes place. As the typical life of a roadway between rebuilds or rehabilitation in the Ottawa-Carleton environment is about 25 years, the comprehensive pedestrian network on Regional Roads envisioned in the Plan would be realised over the 25 year planning period.

This approach would be sub-optimal as some existing discontinuities in the network could potentially remain until the end of the planning period. In addition, the provision of short sections of sidewalk in some locations would dramatically improve the quality, safety and convenience of pedestrian access to public transit stops. Although the extent of these deficiencies is minor, relative to the overall network, failure to address these difficulties will result in a poor return on the capital investments made in both the existing and new sidewalks in terms of increasing the share of travel by foot or public transit.

A two pronged strategy, of introducing sidewalks in conjunction with major road construction, paralleled by a proactive annual deficiency and discontinuity retrofit program, would address this problem. Such a program could operate in a similar manner to other transportation system deficiency programs such as the Safety Improvement Program, incorporating an implementation priority system. The system would have to rationally accommodate the value of individual links to the transportation system as a whole, OC Transpo, other agencies and general public requests and concerns, plus safety and security issues.

If Council implements the infrastructure requirements identified in Table 6 of the Regional Official Plan approximately 25 Km of the sidewalk deficiencies would be addressed in that 10 year program. Implementing all the widenings identified in the ROP in the 11-25 year period will address a further 70 Km of the sidewalk deficiencies. Consequently 120 Km of sidewalk deficiencies will not be met by the implementation of the road widening proposals of the ROP and these could be the basis of an accelerated program to eliminate these deficiencies.

### Conclusion

*Given that the intent of a retrofit program is largely that of maximising the return on infrastructure investments already made, it would be appropriate to establish a target year for discontinuity elimination substantially sooner than the approximately 22 year planning horizon. A target of 12 years, or about half of the planning period, could be considered as the initial basis for establishing an annual budget, that would address those deficiencies that will not be addressed through road widenings by the end of the planning*

*period. To eliminate all these deficiencies within this time-frame would require the annual expenditure of approximately \$0.75 million. (2000\$)*

*As the new City of Ottawa will be responsible for all municipal roads there are likely to be sidewalk deficiencies on the local road network also. Potential costs of a local road network deficiency elimination program have not yet been established. However, it is recommended that a sidewalk retrofit program and priority list be established now so that the arterial roads can meet the needs of pedestrians.*

(v) Winter Maintenance

Area municipalities set their own standards for snow clearance of sidewalks. They all place higher priority for snow removal from sidewalks on Regional roads and streets with transit service than other streets, which provide similar levels of service. With the creation of the new City of Ottawa a new corporate standard for the winter maintenance of sidewalks will be a requirement.

The biggest challenge faced in the winter maintenance of sidewalks, is to co-ordinate road and sidewalk snow clearance activities to minimise:

- a) the blocking of sidewalks with snow or ice removed from the road surface, and
- b) the creation of liquid or frozen ponding on sidewalks.

This challenge is independent of who actually carries out each maintenance activity, but is best met where one service provider provides both.

This is perhaps best exemplified by some roads, particularly those in the Central Area, which typically have narrow sidewalks immediately adjacent to the curb and no temporary snow storage boulevard. To ensure that both pedestrian and traffic movements can be reasonably accommodated for the period prior to snow removal, it is normal practice at the heaviest used locations to pair a sidewalk plough with a roadway plough so that as the roadway plough pushes a windrow of snow towards the curb the sidewalk plough pushes against the same windrow from the other side at the same time. With roads and sidewalks in the same jurisdiction in the future a higher level of winter maintenance is possible.

Conclusion

*Winter maintenance costs to be borne by the new City of Ottawa tax base are not likely to lead to any additional cost to tax payers, and may indeed result in lower overall maintenance costs and higher level of service.*

**TABLE 1****INVENTORY OF SIDEWALKS ALONG REGIONAL ROADS BY JURISDICTION**

MUNICIPALITY	URBAN AREA				GREENBELT & OPEN SPACE				TOTAL			
	Provided (km)	Percentage Provided	Deficiencies (km)	Percentage Deficiencies	Provided (km)	Percentage Provided	Deficiencies (km)	Percentage Deficiencies	Provided (km)	Percentage Provided	Deficiencies (km)	Percentage Deficiencies
City of Ottawa	307.7	86%	49.9	14%	18.8	83%	3.8	17%	326.5	86%	53.7	14%
Village of Rockcliffe Park	0.7	50%	0.7	50%	0.0	-	0.0	-	0.7	50%	0.7	50%
City of Vanier	8.7	99%	0.1	1%	0.0	-	0.0	-	8.7	99%	0.1	1%
City of Nepean	53.0	71%	21.3	29%	16.6	29%	41.4	71%	69.6	53%	62.7	47%
City of Kanata	13.9	51%	13.4	49%	2.1	45%	2.6	55%	16.0	50%	16.0	50%
City of Gloucester	42.3	56%	33.1	44%	1.7	5%	35.1	95%	44.0	39%	68.2	61%
City of Cumberland	14.7	54%	12.5	46%	0.0	-	0.0	-	14.7	54%	12.5	46%
<b>TOTAL</b>	441.0	77%	131.0	23%	39.2	32%	82.9	68%	480.2	69%	213.9	31%

(vi) Pedestrian Access to Public Transit

Since the introduction of the Transitway there have been significant difficulties in providing year round pedestrian access to those Transitway stations not located directly adjacent to a local street or Regional road. In these situations snow clearance of connecting pathways may be provided by OC Transpo, area municipalities and in some cases the private sector.

In order to improve levels of service, a consistent approach to pedestrian needs is warranted. Therefore, any future service contracts or agreements for maintenance of sidewalks should be expanded to include pathways to Transitway stations.

Although there are more bus stops on area municipality streets than Regional roads, the level of passenger activity at the stops on the Regional roads is much higher. Snow ploughing and removal activities and sequences at these bus stops vary significantly throughout the Urban Transit Area and is a function of the age and form of urban development, the municipality, and which service providers are maintaining the roadway pavement and sidewalks.

Some winter maintenance practices, particularly those of not clearing snow from passenger waiting areas at bus stops until general snow removal from the entire street is undertaken, can result in significant difficulties for boarding and alighting transit users and potentially hazardous situations for some users. The ageing of the population over the next few decades will exacerbate the consequences of such conditions.

With the new City of Ottawa assuming full responsibility for all winter maintenance of its rights-of-way, it could specifically begin to systematically address the appropriate priorities for all the users of its transportation systems, and explore and develop more appropriate practices for bus stop areas in terms of sequence, timing, number, frequency and type of winter maintenance activities.

Conclusion

*Assumption of responsibility by the new City of Ottawa should ensure that Public Transit users are better served by more appropriate facility implementation and maintenance practices.*

(vii) Capital Costs

The costs of constructing sidewalks on new and reconstructed Regional roads, will add about 2 to 5% to roadway construction costs.

As has been indicated above the total cost of eliminating current Regional road sidewalk deficiencies is approximately \$16 million. (2000\$)

A capital program of approximately \$0.75m (2000\$) will eliminate the sidewalk deficiencies that would otherwise not be addressed by the Regional road widenings identified in the ROP.

Additional funds will be required for the elimination of sidewalk deficiencies on the existing local municipal roadway network which will become the responsibility of the new City of Ottawa in 2001.

### OVERALL CONCLUSION

With the creation of the new City of Ottawa and the resultant one-tier responsibility for sidewalks on all roads, the public will receive, for essentially the same cost, higher quality walking conditions on a year round basis that will promote the achievement of the travel share targets set in the Transportation Master Plan for both walking and public transit. This in turn will present the further benefits of lessening automobile travel, associated air pollution and roadway construction costs. The approval of a program to address deficiencies in the existing sidewalk system along Regional Roads at this time will put a commitment in place for improving pedestrian facilities along arterial roads that will enhance the safety and security of all road users.

### FINANCIAL IMPLICATIONS

The elimination of all the existing sidewalk deficiencies along Regional road will require the expenditure of approximately \$16m (2000\$). A program to spend approximately \$0.75m per annum will eliminate the deficiencies in approximately 12 years that will not be addressed by the implementation of the road widenings identified in the ROP, which are planned to be in place by 2021.

The implementation of a sidewalk deficiency elimination program will add to annual maintenance costs.

*Approved by*  
*N. Tunnacliffe, MCIP, RPP*

DMB/BR/jg